

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: STREETWORKS

Report Number: P841241

Luminaire Tested: **ARCH4-150-730-U-T4W-HSS**

Issue Date: 5/27/2024

### Test Information

Test Method: LM-79-08  
Report Number: P841241  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-150-730-U-T4W-HSS  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 3000K, 1230mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 17061 lumens  
Efficiency: N/A  
Efficacy: 113.1 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2

Input Watts (W): 150.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



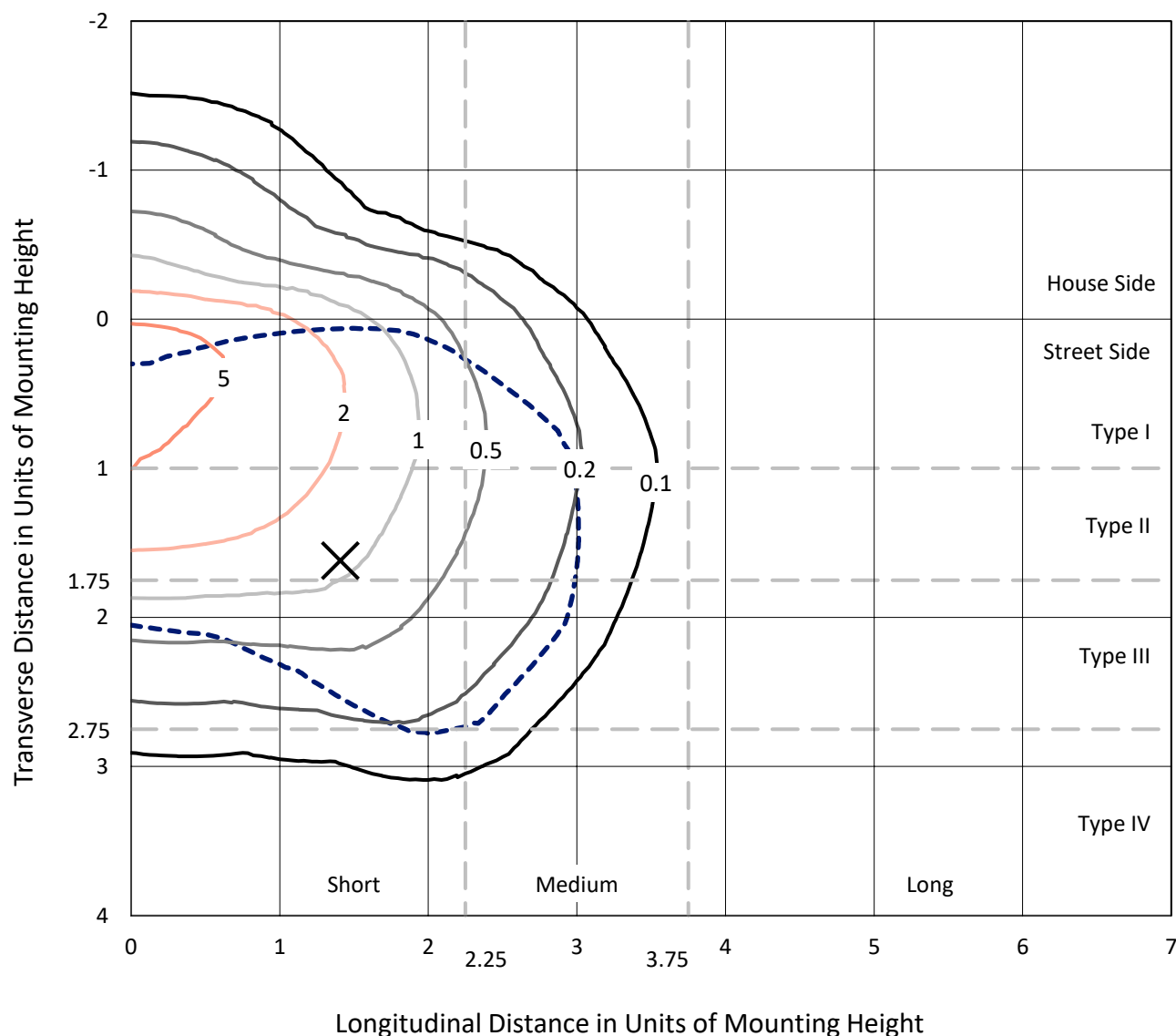
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

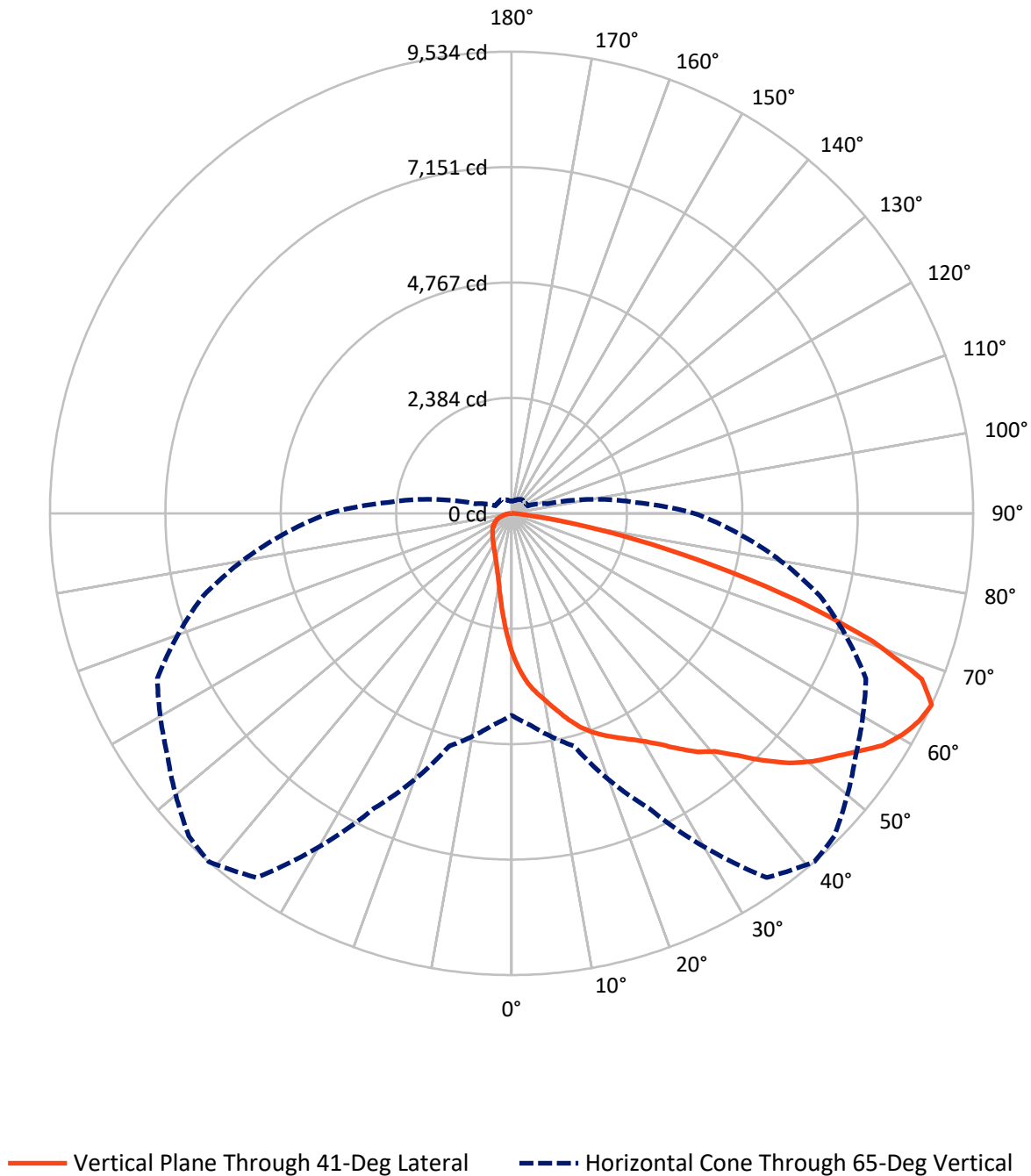


Based on 25 foot mounting height. Maximum calculated value = 6.7 fc

Type III - Short - N/A

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## Luminous Intensity Polar Plot



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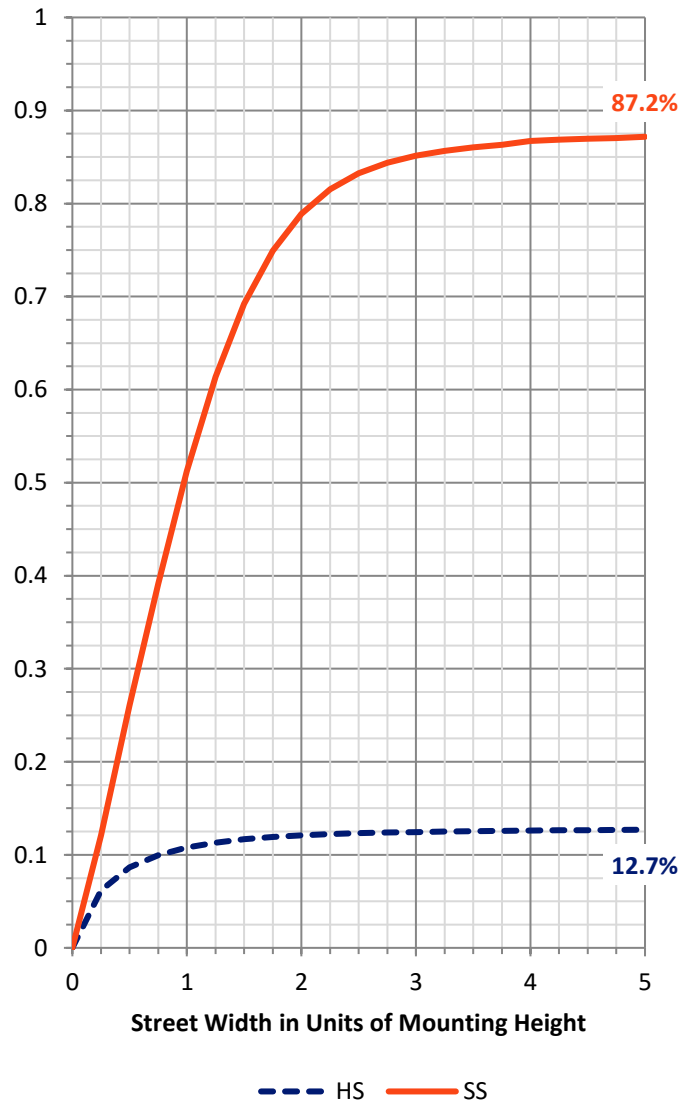
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2190.4   | 0.0    | 2190.4  |
|                    | % Fixture | 12.8     | 0.0    | 12.8    |
| <b>Street Side</b> | Lumens    | 14870.6  | 0.0    | 14870.6 |
|                    | % Fixture | 87.2     | 0.0    | 87.2    |
| <b>Total</b>       | Lumens    | 17061.0  | 0.0    | 17061.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 270.9   | 1.6       |
| 10°-20°   | 812.2   | 4.8       |
| 20°-30°   | 1397.3  | 8.2       |
| 30°-40°   | 2119.2  | 12.4      |
| 40°-50°   | 3104.7  | 18.2      |
| 50°-60°   | 3920.6  | 23.0      |
| 60°-70°   | 3676.3  | 21.5      |
| 70°-80°   | 1638.5  | 9.6       |
| 80°-90°   | 121.4   | 0.7       |
| 90°-100°  | 0.0     | 0.0       |
| 100°-110° | 0.0     | 0.0       |
| 110°-120° | 0.0     | 0.0       |
| 120°-130° | 0.0     | 0.0       |
| 130°-140° | 0.0     | 0.0       |
| 140°-150° | 0.0     | 0.0       |
| 150°-160° | 0.0     | 0.0       |
| 160°-170° | 0.0     | 0.0       |
| 170°-180° | 0.0     | 0.0       |
| 0°-90°    | 17061.0 | 100.0     |
| 0°-180°   | 17061.0 | 100.0     |

**Coefficient of Utilization**



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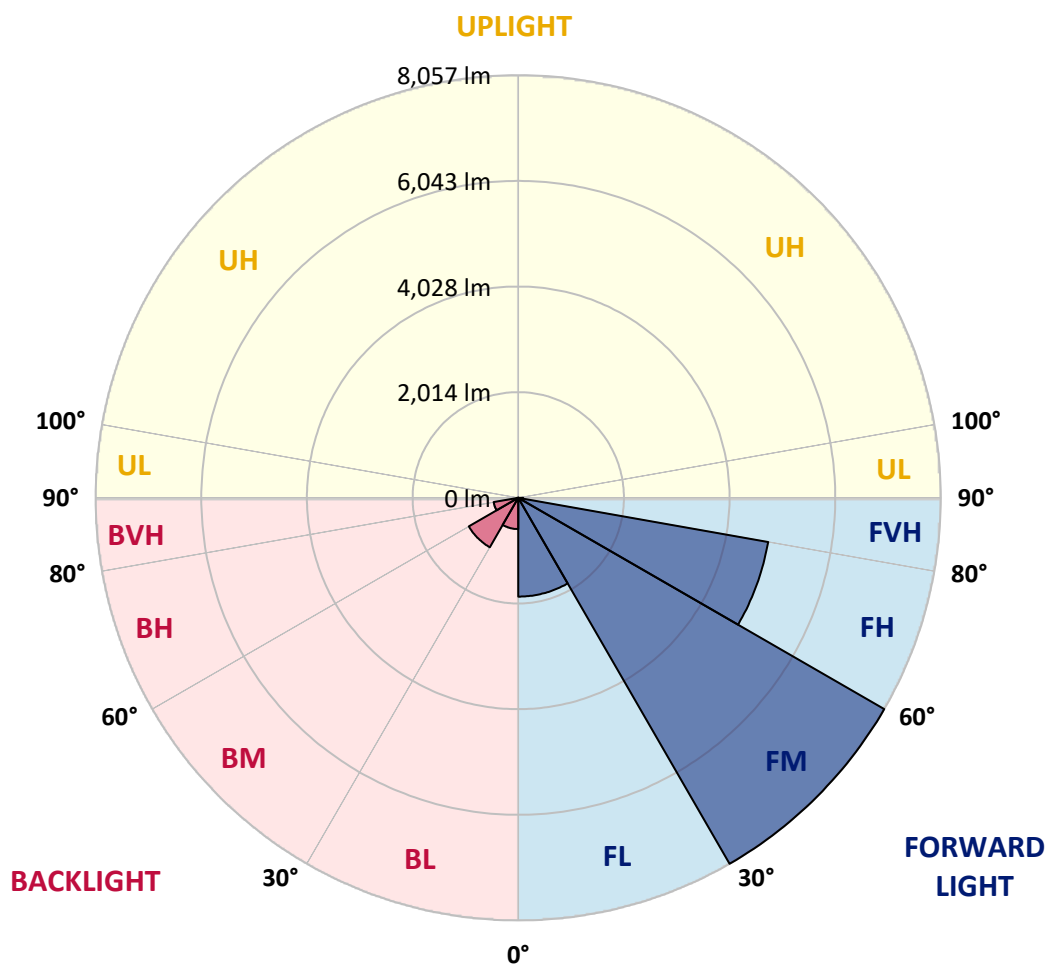
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1884.2 | 11.0      |                         |      |         |
| FM   | (30°-60°)   | 8056.9 | 47.2      |                         |      |         |
| FH   | (60°-80°)   | 4838.9 | 28.4      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 90.7   | 0.5       |                         |      | G1/100  |
| BL   | (0°-30°)    | 596.2  | 3.5       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1087.6 | 6.4       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 475.8  | 2.8       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 30.7   | 0.2       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G2**

Type III Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 41°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2907.1 | 2907.1 | 2907.1 | 2907.1 | 2907.1 | 2907.1 | 2907.1 | 2907.1 | 2907.1 | 2907.1 | 2907.1 |
| 2.5°  | 3353.2 | 3342.5 | 3335.3 | 3295.7 | 3295.7 | 3241.7 | 3245.3 | 3194.9 | 3133.8 | 3036.6 | 2932.3 |
| 5°    | 3669.9 | 3655.5 | 3637.5 | 3597.9 | 3583.5 | 3529.5 | 3522.3 | 3450.4 | 3346.0 | 3176.9 | 2989.9 |
| 7.5°  | 3946.9 | 3932.5 | 3907.3 | 3849.8 | 3810.2 | 3745.4 | 3727.4 | 3633.9 | 3518.7 | 3310.1 | 3047.4 |
| 10°   | 4198.8 | 4188.0 | 4155.6 | 4083.6 | 4029.7 | 3950.5 | 3918.1 | 3792.2 | 3648.3 | 3418.0 | 3094.2 |
| 12.5° | 4454.2 | 4439.8 | 4396.6 | 4335.5 | 4270.7 | 4177.2 | 4137.6 | 3975.7 | 3792.2 | 3536.7 | 3162.6 |
| 15°   | 4691.7 | 4670.1 | 4637.7 | 4572.9 | 4515.4 | 4425.4 | 4382.2 | 4191.6 | 3968.5 | 3669.9 | 3252.5 |
| 17.5° | 4846.4 | 4828.4 | 4799.6 | 4763.6 | 4716.9 | 4648.5 | 4605.3 | 4418.2 | 4144.8 | 3799.4 | 3346.0 |
| 20°   | 4939.9 | 4932.7 | 4921.9 | 4900.3 | 4878.8 | 4832.0 | 4799.6 | 4623.3 | 4335.5 | 3925.3 | 3436.0 |
| 22.5° | 5011.9 | 5004.7 | 5001.1 | 5001.1 | 5004.7 | 4986.7 | 4965.1 | 4814.0 | 4519.0 | 4058.4 | 3518.7 |
| 25°   | 5123.4 | 5119.8 | 5112.6 | 5105.4 | 5130.6 | 5134.2 | 5127.0 | 5022.7 | 4749.2 | 4234.7 | 3623.1 |
| 27.5° | 5278.1 | 5267.3 | 5252.9 | 5245.7 | 5270.9 | 5288.9 | 5303.3 | 5231.4 | 4993.9 | 4414.6 | 3741.8 |
| 30°   | 5515.6 | 5483.2 | 5447.2 | 5422.0 | 5440.0 | 5468.8 | 5501.2 | 5458.0 | 5245.7 | 4637.7 | 3864.1 |
| 32.5° | 5796.2 | 5756.6 | 5673.9 | 5627.1 | 5673.9 | 5695.5 | 5720.7 | 5699.1 | 5508.4 | 4878.8 | 3986.5 |
| 35°   | 6138.0 | 6091.2 | 6004.9 | 5936.5 | 6019.3 | 5972.5 | 5961.7 | 5940.1 | 5756.6 | 5116.2 | 4123.2 |
| 37.5° | 6706.5 | 6638.1 | 6501.4 | 6350.3 | 6350.3 | 6249.6 | 6210.0 | 6145.2 | 5979.7 | 5328.5 | 4256.3 |
| 40°   | 7364.9 | 7275.0 | 7098.7 | 6875.6 | 6670.5 | 6461.8 | 6436.6 | 6389.9 | 6242.4 | 5573.2 | 4407.4 |
| 42.5° | 8088.1 | 7915.4 | 7670.7 | 7400.9 | 7069.9 | 6832.4 | 6774.9 | 6641.7 | 6497.8 | 5821.4 | 4558.5 |
| 45°   | 8890.4 | 8530.6 | 8174.4 | 8037.7 | 7490.8 | 7275.0 | 7167.0 | 6926.0 | 6764.1 | 6080.5 | 4716.9 |
| 47.5° | 9019.9 | 8739.3 | 8501.8 | 8480.3 | 7883.0 | 7703.1 | 7580.8 | 7235.4 | 7051.9 | 6357.5 | 4882.4 |
| 50°   | 8948.0 | 8778.9 | 8804.1 | 8717.7 | 8170.8 | 8052.1 | 7958.6 | 7566.4 | 7336.1 | 6623.7 | 5033.5 |
| 52.5° | 8645.8 | 8739.3 | 8883.2 | 8724.9 | 8444.3 | 8347.1 | 8300.4 | 7922.6 | 7602.4 | 6868.4 | 5170.2 |
| 55°   | 8286.0 | 8350.7 | 8660.2 | 8854.4 | 8760.9 | 8674.5 | 8631.4 | 8336.3 | 7865.0 | 7073.5 | 5296.1 |
| 57.5° | 7760.7 | 7731.9 | 8073.7 | 8832.9 | 9091.9 | 9041.5 | 8994.8 | 8742.9 | 8109.7 | 7221.0 | 5375.3 |
| 60°   | 6972.7 | 6911.6 | 7343.3 | 8401.1 | 9199.8 | 9279.0 | 9257.4 | 9012.7 | 8296.8 | 7217.4 | 5342.9 |
| 62.5° | 5609.1 | 5760.2 | 6357.5 | 7695.9 | 9246.6 | 9448.1 | 9408.5 | 9034.3 | 8357.9 | 7008.7 | 5137.8 |
| 65°   | 4170.0 | 4385.8 | 4972.3 | 6724.5 | 9181.8 | 9534.4 | 9426.5 | 8681.7 | 8073.7 | 6595.0 | 4688.1 |
| 67.5° | 3004.2 | 3194.9 | 3623.1 | 5533.6 | 8559.4 | 9138.7 | 9012.7 | 8106.1 | 7418.9 | 6008.5 | 4065.6 |
| 70°   | 2054.4 | 2191.1 | 2482.6 | 4029.7 | 7307.3 | 7901.0 | 7821.8 | 7246.2 | 6386.3 | 5310.5 | 3302.9 |
| 72.5° | 1450.0 | 1507.5 | 1694.6 | 2658.8 | 5551.6 | 6199.2 | 6105.6 | 5961.7 | 5130.6 | 4414.6 | 2568.9 |
| 75°   | 1086.6 | 1122.5 | 1223.3 | 1719.8 | 3745.4 | 4295.9 | 4209.5 | 4292.3 | 3831.8 | 3342.5 | 1870.9 |
| 77.5° | 410.2  | 446.1  | 694.4  | 1097.4 | 2216.3 | 2637.3 | 2550.9 | 2601.3 | 2130.0 | 1687.4 | 931.9  |
| 80°   | 111.5  | 118.7  | 230.3  | 521.7  | 1007.4 | 1313.2 | 1194.5 | 1025.4 | 791.5  | 777.1  | 492.9  |
| 82.5° | 46.8   | 54.0   | 104.3  | 280.6  | 359.8  | 359.8  | 302.2  | 374.2  | 302.2  | 363.4  | 237.5  |
| 85°   | 18.0   | 21.6   | 25.2   | 72.0   | 46.8   | 50.4   | 54.0   | 72.0   | 61.2   | 75.6   | 54.0   |
| 87.5° | 0.0    | 0.0    | 0.0    | 3.6    | 3.6    | 7.2    | 3.6    | 7.2    | 10.8   | 10.8   | 10.8   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

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**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2907.1 | 2907.1 | 2907.1 | 2907.1 | 2907.1 | 2907.1 | 2907.1 | 2907.1 | 2907.1 | 2907.1 | 2907.1 |
| 2.5°  | 2889.1 | 2849.5 | 2792.0 | 2698.4 | 2601.3 | 2547.3 | 2479.0 | 2468.2 | 2396.2 | 2389.0 | 2360.2 |
| 5°    | 2907.1 | 2824.4 | 2676.8 | 2496.9 | 2320.6 | 2183.9 | 2083.2 | 2029.2 | 1924.9 | 1924.9 | 1896.1 |
| 7.5°  | 2921.5 | 2792.0 | 2554.5 | 2288.3 | 2047.2 | 1863.7 | 1727.0 | 1669.4 | 1575.9 | 1568.7 | 1547.1 |
| 10°   | 2925.1 | 2752.4 | 2421.4 | 2076.0 | 1781.0 | 1593.9 | 1460.7 | 1396.0 | 1313.2 | 1306.0 | 1291.6 |
| 12.5° | 2953.9 | 2730.8 | 2302.7 | 1892.5 | 1590.3 | 1388.8 | 1259.3 | 1205.3 | 1140.5 | 1133.3 | 1118.9 |
| 15°   | 3000.7 | 2730.8 | 2201.9 | 1737.8 | 1421.2 | 1234.1 | 1122.5 | 1072.2 | 1025.4 | 1018.2 | 1011.0 |
| 17.5° | 3047.4 | 2723.6 | 2101.2 | 1593.9 | 1280.9 | 1111.8 | 1014.6 | 975.0  | 939.1  | 935.5  | 928.3  |
| 20°   | 3090.6 | 2720.0 | 2000.4 | 1471.5 | 1172.9 | 1011.0 | 935.5  | 899.5  | 870.7  | 870.7  | 867.1  |
| 22.5° | 3133.8 | 2712.8 | 1903.3 | 1356.4 | 1079.4 | 935.5  | 870.7  | 831.1  | 809.5  | 809.5  | 805.9  |
| 25°   | 3198.5 | 2712.8 | 1813.3 | 1259.3 | 1003.8 | 877.9  | 813.1  | 784.3  | 766.4  | 762.8  | 762.8  |
| 27.5° | 3274.1 | 2734.4 | 1734.2 | 1172.9 | 939.1  | 820.3  | 770.0  | 741.2  | 719.6  | 712.4  | 716.0  |
| 30°   | 3356.8 | 2752.4 | 1662.2 | 1097.4 | 877.9  | 777.1  | 723.2  | 694.4  | 672.8  | 665.6  | 669.2  |
| 32.5° | 3439.6 | 2774.0 | 1597.5 | 1029.0 | 816.7  | 737.6  | 683.6  | 651.2  | 629.6  | 626.0  | 626.0  |
| 35°   | 3529.5 | 2795.6 | 1532.7 | 971.4  | 766.4  | 698.0  | 647.6  | 611.6  | 597.3  | 590.1  | 593.7  |
| 37.5° | 3619.5 | 2831.5 | 1471.5 | 917.5  | 730.4  | 662.0  | 615.2  | 579.3  | 568.5  | 564.9  | 564.9  |
| 40°   | 3727.4 | 2885.5 | 1446.4 | 881.5  | 698.0  | 629.6  | 590.1  | 554.1  | 543.3  | 543.3  | 543.3  |
| 42.5° | 3817.4 | 2928.7 | 1424.8 | 841.9  | 672.8  | 600.8  | 564.9  | 536.1  | 528.9  | 525.3  | 528.9  |
| 45°   | 3907.3 | 2968.3 | 1396.0 | 805.9  | 640.4  | 572.1  | 543.3  | 514.5  | 507.3  | 507.3  | 507.3  |
| 47.5° | 3997.3 | 2989.9 | 1356.4 | 770.0  | 611.6  | 546.9  | 521.7  | 496.5  | 489.3  | 489.3  | 489.3  |
| 50°   | 4069.2 | 3007.8 | 1298.8 | 730.4  | 579.3  | 525.3  | 500.1  | 474.9  | 467.7  | 467.7  | 467.7  |
| 52.5° | 4141.2 | 3011.4 | 1237.7 | 683.6  | 546.9  | 500.1  | 478.5  | 453.3  | 446.1  | 442.5  | 442.5  |
| 55°   | 4205.9 | 3007.8 | 1165.7 | 629.6  | 510.9  | 471.3  | 453.3  | 431.7  | 417.4  | 403.0  | 410.2  |
| 57.5° | 4252.7 | 3004.2 | 1083.0 | 575.7  | 474.9  | 442.5  | 435.3  | 406.6  | 377.8  | 341.8  | 349.0  |
| 60°   | 4234.7 | 2964.7 | 993.0  | 507.3  | 435.3  | 413.8  | 413.8  | 374.2  | 323.8  | 305.8  | 309.4  |
| 62.5° | 4119.6 | 2853.1 | 899.5  | 435.3  | 395.8  | 385.0  | 381.4  | 338.2  | 298.6  | 280.6  | 284.2  |
| 65°   | 3774.2 | 2572.5 | 762.8  | 370.6  | 356.2  | 352.6  | 352.6  | 313.0  | 277.0  | 255.5  | 259.0  |
| 67.5° | 3248.9 | 2158.7 | 622.4  | 313.0  | 316.6  | 323.8  | 323.8  | 287.8  | 251.9  | 230.3  | 233.9  |
| 70°   | 2604.9 | 1687.4 | 496.5  | 269.8  | 273.4  | 284.2  | 291.4  | 259.0  | 226.7  | 205.1  | 205.1  |
| 72.5° | 1960.9 | 1280.9 | 399.4  | 226.7  | 244.7  | 244.7  | 255.5  | 230.3  | 197.9  | 176.3  | 179.9  |
| 75°   | 1421.2 | 917.5  | 316.6  | 190.7  | 212.3  | 208.7  | 208.7  | 194.3  | 169.1  | 154.7  | 154.7  |
| 77.5° | 672.8  | 482.1  | 251.9  | 136.7  | 165.5  | 161.9  | 165.5  | 154.7  | 143.9  | 129.5  | 133.1  |
| 80°   | 331.0  | 237.5  | 161.9  | 97.1   | 115.1  | 118.7  | 129.5  | 122.3  | 118.7  | 107.9  | 107.9  |
| 82.5° | 158.3  | 93.5   | 75.6   | 68.4   | 79.2   | 82.8   | 89.9   | 89.9   | 93.5   | 86.3   | 86.3   |
| 85°   | 43.2   | 25.2   | 32.4   | 43.2   | 50.4   | 54.0   | 61.2   | 64.8   | 64.8   | 61.2   | 64.8   |
| 87.5° | 10.8   | 10.8   | 14.4   | 21.6   | 25.2   | 28.8   | 32.4   | 32.4   | 14.4   | 0.0    | 0.0    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)